

Victor Valley Wastewater Reclamation Authority
WASTEWATER TREATMENT PLANT

ANNUAL BIOSOLIDS MONITORING REPORT - 1996

1. GENERAL INFORMATION

Name of Generator: Victor Valley Wastewater Reclamation Authority
Facility Address: 20111 Shay Road, Victorville, CA 92394
Mailing Address: 20111 Shay Road, Victorville, CA 92394
Contact Person: Daniel P. Gallagher, General Manager
Telephone: (760) 246-8638
Ownership: Publicly Owned Treatment works

2. FACILITY INFORMATION

Name: Victor Valley Wastewater Reclamation Authority
Location: 20111 Shay Road, Victorville, CA 92394
Telephone: (760) 246-8638
NPDES Number: CA 0102822
Influent Flow: 7.58 mgd for 1996 (average daily flow rate)

3. BIOSOLIDS INFORMATION

Treatment: Biosolids at the Victor Valley Water Reclamation Authority, which begin as primary and waste activated sludge, are thickened, anaerobically digested, dried in soil-cement lined drying lagoons, and then removed from the beds and stored on site until they achieve Class A quality. Ultimately (and within 2 years) they are transported to farm lands where the nutrients and humus value of the material is beneficially reused to grow such crops as dates, citrus and vegetables. This year Class A biosolids were land applied from October 21, 1996 to December 29, 1996 to two farms, the Antelope Valley Site (AOD Site) and the Riverside County Site (R1 Site).

Quantities Generated: = 1,747 wet tons¹
= 1,310 dry tons
= 1,188 dry metric tonnes

¹ Moisture content estimated at 75% total solids

Monitoring & Frequency:

- Pathogen reduction is monitored by testing for Fecal Coliform, Helminth Ova and Enteric Virus. Sampling and testing for compliance is required once every quarter, but was only conducted twice in 1996.
- Sampling and testing for 40 CFR 503 Table 3 pollutant concentrations are required once every quarter, but was only conducted twice in 1996.
- Sampling and testing for biosolids moisture content is required once every quarter, but was only conducted twice in 1996.

Sample Type: Solar drying bed dewatered cake.

Quality: • Class A based on one test result.

4. LAND APPLICATION INFORMATION

Volume Applied = 5,353 wet tons²
= 4,229 dry tons
= 3,838 dry metric tonnes

Pollutants: see Table A, Section 1

Pathogens: see Table A, Section 2

Vector Attraction Reduction: see Table A, Section 3

Land Application Sites: The District distributes biosolids that have achieved Class A quality. Currently there are no rules or regulations that require recordkeeping or monitoring of Class A applications. None-the-less the District and its service provider have maintained the following site application records:

Site:	Antelope Valley Site
Owner:	Olin E. Derrick
Operator:	Pima Gro
Contact:	Gary Bruggeman
Address:	P.O. Box 7547, Redlands, CA 92375
Telephone:	(909) 798-8717
Site Location:	S1/2 of Section 6, T7N, R10W, MDB&M 200 acres Northwest of 90th Street East and Avenue H intersection, in County of Los Angeles, CA
Permits:	Lahontan RWQCB Order No. 6-95-100-08
Biosolids Quantity:	671.7 wet tons
Application Rate:	9.6 d.t./acre
Nitrogen Rate:	163 lbs/acre
Crops Planted/Grown:	Barley

² Averaged 79% total solids

Site:	Riverside County Site
Owner:	Carl Rheinegains
Operator:	Pima Gro
Contact:	Gary Bruggeman
Address:	P.O. Box 7547, Redlands, CA 92375
Telephone:	(909) 798-8717
Site Location:	Section 3, T6S, R2W, MDB&M
Permits:	4,681 required
Biosolids Quantity:	wet tons
Application Rate:	15 d.t./acre
Nitrogen Rate:	not reported
Crops Planted/Grown:	not reported

5. DISPOSAL INFORMATION....

Volume = **0 wet tons**

6. LABORATORY DATA.....See Table A, page 4.

Table A
Victor Valley Wastewater Reclamation Authority
Compliance Summary
1996

	A	B	C	D	E	F	G	H
		1st Quarter 2/11/96	2nd Quarter 3/28/96	3rd Quarter 1996	4th Quarter 11/6/96	Annual Av.	Annual Max	Applicable 503 Criteria
1								
2	1. Biosolids Pollutant Concentrations - see Note (2)							
3	Arsenic	4.38	ND	Missing Data (A)	8.90	6.6	8.9	41
4	Cadmium	5.92	ND		3.3	4.6	5.92	39
5	Chromium	38.9	41.3		76.8	52.3	76.8	1200
6	Copper	204	160		361	241.7	361	1500
7	Lead	38.8	22.5		45.30	35.5	45.3	300
8	Mercury	1.72	2.84		3.96	2.8	3.96	17
9	Molybdenum	4.26	14.80		10.1	9.7	14.8	deleted
10	Nickel	14.1	11.3		30.90	18.8	30.9	420
11	Selenium	1.72	0.29		5.74	2.6	5.74	(1) 36/100
12	Zinc	306	391		544	413.7	544	2800
13	Notes: (1) 40 CFR 503 limit changed from 36 mg/kg to 100 mg/kg on October 25, 1995.							
14	(2) per 40 CFR 503.13(b)(3), Pollutant Concentrations.							
15	2. Pathogens							
16			3/26/96		11/6/96			
17	Hel Ova/4 gm. (3)	missing data (A)	<1	missing data (A)	<1	<1	<1	<1
18	PFU EV/4 gm. (4)	missing data (A)	<1	missing data (A)	<1	<1	<1	<1
19	MPN FC/gm. (5)	missing data (A)	12	missing data (A)	ND	6	12	<1000
20	Notes: (3) Helminth Ova per 4 grams.							
21	(4) Plaque-forming Unit Enteric Virus per 4 grams.							
22	(5) In 1996 this unit of measure was reported as MPN FC/100ml.							
23	This was corrected in later years to MPN per gram of total solids.							
24	3. Vector Attraction Reduction (B)							
25								
26	Solids Concentration	Missing Data (A)	79.10%	Missing Data (A)	64.60%	71.85%	64.60%	solids >=75%
27								
28	(A)...Sample was not collected in this quarter. A new sampling /testing procedure is now in place.							
29	(B)...Vector Attraction Reduction (VAR) has been achieved by							
30	drying stabilized solids to a level equal to or greater than 75%.							
31	Authority's biosolids storage area from approximately 4/16/97 through 2/28/98. The Authority believes that							
32	during this time the biosolids represented by this sample attained 75% or more solids concentration.							